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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,273	09/16/2003	George D. Hermann	06-516 US	3435
34704 7590 12/22/2011 BACHMAN & LAPOINTE, P.C. 900 CHAPEL STREET SUITE 1201 NEW HAVEN, CT 06510				
EXAMINER				
RYCKMAN, MELISSA K				
ART UNIT		PAPER NUMBER		
3773				
MAIL DATE		DELIVERY MODE		
12/22/2011		PAPER		

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/664,273  
Filing Date: September 16, 2003  
Appellant(s): HERMANN ET AL.

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George A. Coury  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 11/3/11 appealing from the Office action mailed 4/26/11.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The following is a list of claims that are rejected and pending in the application:

Claims 1-49 and 51-54 are pending. Claims 4 and 22 are withdrawn. Claims 1-3,5-21,23-49 and 51-54 are rejected.

**(4) Status of Amendments After Final**

The Appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner.

#### **(7) Claims Appendix**

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

#### **(8) Evidence Relied Upon**

6228104	Fogarty	5-2001
5893878	Pierce	4-1999
2706987	Bramstedt	4-1955
6484371	Romanko	11-2002

#### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-3, 15-19, 30-33, 48, 49 and 51-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fogarty (U.S. Patent No. 6,228,104) and further in view of Pierce (U.S. Patent No. 5,893,878).

Claims 1,19,48,49:

Fogarty teaches an insert for attachment to a jaw-type surgical instrument adapted for grasping or occluding a vessel, said insert comprising an elongate member (80) having opposed proximal and distal ends, a compliant cushion (80) having a tissue-engaging contact surface, said insert further comprising a back surface opposite to said contact surface, and a jaw attachment (86a) member on the back surface, wherein said contact surface and said back surface extend between said opposed proximal and distal ends and face opposite directions.

Fogarty teaches the claimed invention but does not specify hooked elements; however Pierce teaches a jaw-type instrument having a surface with a plurality of molded, hooked traction elements on at least a region of said surface, where the hooked traction elements (80 and 24 together in Fig. 13 are hooked traction elements-hook as defined by a curved substance for catching, pulling, holding or suspending something, each of 80 and 24 are curved and are capable of holding something) are configured to have at least two crooks (24 and 80, Fig. 13), wherein said hooked traction elements are of unitary construction with said tissue engaging contact surface. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have hooked elements as this aids in securely holding tissue.

Claims 15-18 and 30-33:

Since the device of Fogarty teaches all structural limitations as set forth by the independent claims, it is inherent that the device is capable of performing the function required by the claims, that being providing traction forces of either 6-8 pounds or 1.5-2 pounds.

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Claims 51-53:

Fogarty and Pierce teach the claimed invention including using a plastic material (the durometer is not stated, however the claim simply states about 2A to about 90A, therefore using the broadest reasonable interpretation the material of Fogarty and Pierce would have a durometer of *about* 2A to 90A, Fogarty teaches a durometer of 15-70 A col. 5, ll. 50) the integral piece that connects the jaw attachment member to the cushion, except do not teach two separate pieces that connect the jaw attachment member to the cushion. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have two separate pieces connect the jaw attachment member to the cushion, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman*, 168 USPQ 177, 179.

Fogarty teaches two different materials used for each side (col. 5, ll. 53-55) including an elastomeric material and a plastic. Fogarty does not specify first overmold being more rigid than the second overmold, however it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a more rigid material (plastic, as in the art it is common for plastics to be considered more rigid than elastomeric materials) for the first overmold to maintain the position of the cushion in the jaws.

Claims 5-7, 23-25 and 42-47, are rejected under 35 U.S.C. 103(a) as being unpatentable over Fogarty (U.S. Patent No. 6,228,104) and Pierce (U.S. Patent No.

5,893,878) as applied to claims 1 and 19 above, and further in view of Bramstedt (U.S. Patent No. 2,706,987) .

Fogarty and Pierce teach the claimed invention, where Pierce teaches an insert (44) for attachment to a jaw-type surgical instrument (Fig. 1) adapted for grasping or occluding a vessel, said insert comprising a compliant cushion (22) having a tissue-engaging contact surface (24) and having a plurality of molded, hooked traction elements on at least a region of said surface (fig. 1), wherein said hooked traction elements are of unitary construction with said tissue engaging contact surface (Fig. 13), but Fogarty and Pierce are silent regarding the height of the traction elements being no more than about .3mm. Bramstedt teaches surgical clamp inserts, wherein the traction elements are .004-.008 inches (Bramstedt, col. 1, II. 35) in order to provide lessened or reduced residual witness marks corresponding to less trauma to the clamped vessel.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Fogarty and Pierce with traction elements no more than .3 mm in height in order to provide lessened or reduced residual witness marks corresponding to less trauma to the clamped vessel.

Claims 8-14, 26-29 and 34-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pierce, Fogarty and Bramstedt (US 2706987) as applied to claims 5 and 23 above, and further in view of Romanko et al. (US 6484371) .

Pierce, Fogarty and Bramstedt teach all limitations of preceding dependent claims 5 and 23, and limitations of independent claims 13, 34 and 38 as described with

respect to claims 5 and 23, but fails to teach the density of hooked traction elements on the surface is at least  $300/\text{cm}^2$ . Regarding the limitation wherein the density of the hooked traction elements on the surface region is at least  $300/\text{cm}^2$ , Romanko teaches wherein the density of the hooked traction elements may be up to 465 elements per square centimeter or less. It would have been an obvious matter of design choice to provide Pierce, Fogarty and Bramstedt with a traction element density of  $300/\text{cm}^2$ , since applicant has not disclosed that providing such a density provides any advantage over other densities, and providing a density of  $300/\text{cm}^2$  is well known in the art.

Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pierce and Fogarty as applied to claim 3 above, and further in view of Romanko et al. (US 6484371 ).

Fogarty and Pierce teach the claimed invention but are silent regarding a hook comprising a single stem with two crooks extending in opposite directions from said single stem. However Romanko teaches a hook with a single stem (22, Fig. 1) with two crooks (Fig. 1) extending in opposite directions from said stem. Replacing one type of known hook with another known hook is an obvious substitution of one known element for another. The replacement would be expected to yield a device which hooks tissue.

#### **(10) Response to Argument**

Regarding Claims 1, 3, 19, 30, 32, 48 and 49: The Appellant argues that elements 24 and 80 of Pierce are not crooks of a hook. The examiner disagrees and



points to col. 2, ll. 60 of Pierce which states the tissue contact surface comprises hooks. Both 24 and 80 of Pierce are capable of pulling, holding or suspending something, which is what a hook does. The word crook according to the World English Dictionary is "a curved or hooked thing", each of 24 and 80 are curved and are therefore crooks, and 24 and 80 together are a hook (as defined as being capable of pulling, holding or suspending something). Those of ordinary skill in the art would have found it obvious to modify the teachings of Fogarty to include the tissue contact surface of Pierce for the purpose of aiding in contacting the tissue (Pierce col. 2, ll. 58). The examiner disagrees with appellant's argument that one of ordinary skill in the art would find the devices of Fogarty and Pierce to be so different that they would not find it obvious to add the hooks of Pierce to Fogarty's device. Both references describe surgical instruments with jaws for retaining tissue.

Regarding Claims 52 and 53, Fogarty teaches two different materials for the overmolds (col. 5, ll. 53-55) including an elastomeric material and a plastic, but does not specify the hardness of the materials. Inherently two different materials (especially elastomeric material and plastic) have different Shore A. The examiner maintains the rejection above which states it is common in the art for plastics to be considered more rigid than elastomeric materials and to have the plastic material be used for the first overmold to maintain the position of the cushion in the jaws.

Regarding Claims 5-7, 23-25, and 42-47: The Appellant argues Bramstedt teaches a clamp with 0.004-.008 inches in height, however Bramstedt is a much earlier generation in the technology and is not appropriate to modify the combination of Fogarty

as modified by Pierce. In response to Appellant's argument based upon the age of the references, contentions that the reference patents are old are not impressive absent a showing that the art tried and failed to solve the same problem notwithstanding its presumed knowledge of the references. See *In re Wright*, 569 F.2d 1124, 193 USPQ 332 (CCPA 1977).

The Appellant also argues Bramstedt is drawn to a clamp having teeth of a specific Rockwell hardness and that one of ordinary skill in the art looking at the teachings of Fogarty and Pierce and considering an instrument having a compliant cushion with tissue-engaging contact surfaces would not have looked to the teachings of Bramstedt. The examiner's response is Bramstedt teaches, in the same field of endeavor, jaws for use during surgery where the specific Rockwell hardness is determined for the "gripping power and durability" (col. 1, ll. 77 and col. 2, ll. 1). The gripping power and durability of the jaw of Bramstedt is appropriate for the device of Fogarty as modified by Pierce, as all three references are directed towards clamping and holding tissue.

Regarding Claims 8-14, 26-29, 34-41 and 54: The Appellant argues Romanko teaches a hook and loop fastener that is not designed to be used with tissue. The examiners response is Romanko teaches another type of hook, which is analogous to the hook of Pierce. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the hook of Pierce with the shape of Romanko in order to aid in capturing different types of tissue. The Appellant states in the current

application's specification in paragraph 31 (on page 6) that certain variations of the hooked traction elements can be molded or woven.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Melissa Ryckman

/Melissa Ryckman/

Examiner, Art Unit 3773

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TC 3700 TQAS